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TECH CENTER 1600/2900

SEQUENCE LISTING

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Kumagai, Yoshinari

<120> Integrin Binding Motif Containing
Peptides and Methods of Treating Skeletal Diseases

<130> BEAR-006

<140> 09/641,034

<141> 2000-08-16

<160> 47

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Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys
20 25 30
Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu Arg
35 40 45
Gly Asp Asn Asp Ile Ser Pro Phe Ser Gly Asp Gly Gln Pro Phe Lys
50 55 60
Asp Ile Pro Gly Lys Gly Glu Ala Thr Gly Pro Asp Leu Glu Gly Lys
65 70 75 80
Asp Ile Gln Thr Gly Phe Ala Gly Pro Ser Glu Ala Glu Ser Thr His

85 90 95

Leu

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 Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg Ile Gln His
 1 5 10 15
 Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys Ile Pro Ser
 20 25 30
 Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu Arg Gly Asp
 35 40 45

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 Arg Gly Asp Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg
 1 5 10 15
 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys
 20 25 30
 Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu
 35 40 45

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 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg
 1 5 10 15
 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys
 20 25 30
 Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr Thr Asp Arg Gly Asp
 35 40 45

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Arg Gly Asp Ser Pro Val Lys Ser Lys Ser Thr His Arg Ile Gln His
1 5 10 15
Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys Ile Pro Ser
20 25 30
Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu
35 40

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Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg
1 5 10 15
Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Val Lys Lys
20 25 30
Ile Pro Ser Asp Phe Glu Gly Ser Gly Arg Gly Asp
35 40

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<400> 8
Arg Gly Asp Thr His Arg Ile Gln His Asn Ile Asp Tyr Leu Lys His
1 5 10 15
Leu Ser Lys Val Lys Lys Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr
20 25 30
Thr Asp Leu Gln Glu
35

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<400> 9

Asp	Ser	Gln	Ala	Gln	Lys	Ser	Pro	Val	Lys	Ser	Lys	Ser	Thr	His	Arg
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Ile	Gln	His	Asn	Ile	Asp	Tyr	Leu	Lys	His	Leu	Ser	Lys	Val	Lys	Lys
			20					25					30		
Ile	Pro	Ser	Asp	Phe	Glu	Arg	Gly	Asp							
			35					40							

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<400> 10

Arg	Gly	Asp	Leu	Lys	His	Leu	Ser	Lys	Val	Lys	Lys	Ile	Pro	Ser	Asp
1				5					10					15	
Phe	Glu	Gly	Ser	Gly	Tyr	Thr	Asp	Leu	Gln	Glu					
			20					25							

<210> 11

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<400> 11

Asp	Ser	Gln	Ala	Gln	Lys	Ser	Pro	Val	Lys	Ser	Lys	Ser	Thr	His	Arg
1				5					10					15	
Ile	Gln	His	Asn	Ile	Asp	Tyr	Leu	Lys	His	Leu	Ser	Lys	Val	Lys	Lys
			20					25					30		
Ile	Pro	Ser	Arg	Gly	Asp										
			35												

<210> 12

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<223> synthetic peptide

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 Ser Gly Tyr Thr Asp Leu Gln Glu
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<220>
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<400> 13
 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg
 1 5 10 15
 Ile Gln His Asn Ile Asp Tyr Leu Lys His Leu Ser Lys Arg Gly Asp
 20 25 30

<210> 14
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<400> 14
 Arg Gly Asp Val Lys Lys Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr
 1 5 10 15
 Thr Asp Leu Gln Glu
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<400> 15
 Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg
 1 5 10 15
 Ile Gln His Asn Ile Asp Tyr Leu Lys Arg Gly Asp
 20 25

<210> 16
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Arg Gly Asp Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu
1 5 10 15
Gln Glu

<210> 17

<211> 25

<212> PRT

<213> Artificial Sequence

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<223> synthetic peptide

<400> 17

Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg
1 5 10 15
Ile Gln His Asn Ile Asp Arg Gly Asp
20 25

<210> 18

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<212> PRT

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<400> 18

Arg Gly Asp Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu
1 5 10 15

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<211> 19

<212> PRT

<213> Artificial Sequence

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<400> 19

Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Ser Lys Ser Thr His Arg
1 5 10 15
Arg Gly Asp

<210> 20
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<400> 20
Arg Gly Asp Gly Ser Gly Tyr Thr Asp Leu Gln Glu
1 5 10

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<400> 21
Asp Ser Gln Ala Gln Lys Ser Pro Val Lys Arg Gly Asp
1 5 10

<210> 22
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<212> PRT
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<400> 22
Arg Gly Asp Gly Tyr Thr Asp Leu Gln Glu
1 5 10

<210> 23
<211> 10
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<400> 23
Asp Ser Gln Ala Gln Lys Ser Arg Gly Asp
1 5 10

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<211> 40
<212> PRT

al.
Cont.

<213> Artificial Sequence

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<400> 24

Arg	Gly	Asp	Asn	Asp	Ile	Ser	Pro	Phe	Ser	Gly	Asp	Gly	Gln	Pro	Phe
1				5					10					15	
Lys	Asp	Ile	Pro	Gly	Lys	Gly	Glu	Ala	Thr	Gly	Pro	Asp	Leu	Glu	Gly
			20					25					30		
Lys	Asp	Ile	Gln	Thr	Gly	Phe	Ala								
			35				40								

<210> 25

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<400> 25

Asn	Asp	Ile	Arg	Gly	Asp	Ser	Pro	Phe	Ser	Gly	Asp	Gly	Gln	Pro	Phe
1				5					10					15	
Lys	Asp	Ile	Pro	Gly	Lys	Gly	Glu	Ala	Thr	Gly	Pro	Asp	Leu	Glu	Gly
			20					25					30		
Lys	Asp	Ile	Gln	Thr	Gly	Phe	Ala								
			35				40								

<210> 26

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<400> 26

Asn	Asp	Ile	Ser	Pro	Phe	Arg	Gly	Asp	Ser	Gly	Asp	Gly	Gln	Pro	Phe
1				5					10					15	
Lys	Asp	Ile	Pro	Gly	Lys	Gly	Glu	Ala	Thr	Gly	Pro	Asp	Leu	Glu	Gly
			20					25					30		
Lys	Asp	Ile													
			35												

<210> 27

<211> 30

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<400> 27

Asn	Asp	Ile	Ser	Pro	Phe	Ser	Gly	Asp	Arg	Gly	Asp	Gly	Gln	Pro	Phe
1				5				10					15		
Lys	Asp	Ile	Pro	Gly	Lys	Gly	Glu	Ala	Thr	Gly	Pro	Asp	Leu		
		20					25					30			

<210> 28

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<212> PRT

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<223> synthetic peptide

<400> 28

Phe	Ser	Gly	Asp	Gly	Gln	Pro	Phe	Lys	Asp	Ile	Pro	Gly	Lys	Gly	Glu
1				5				10					15		
Ala	Thr	Gly	Pro	Asp	Leu	Glu	Gly	Lys	Asp	Ile	Gln	Thr	Gly	Phe	Ala
		20					25					30			
Gly	Pro	Ser	Glu	Ala	Glu	Ser	Arg	Gly	Asp	Thr	His	Leu			
	35					40					45				

<210> 29

<211> 35

<212> PRT

<213> Artificial Sequence

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<223> synthetic peptide

<400> 29

Ile	Pro	Gly	Lys	Gly	Glu	Ala	Thr	Gly	Pro	Asp	Leu	Glu	Gly	Lys	Asp
1				5				10					15		
Ile	Gln	Thr	Gly	Phe	Ala	Gly	Pro	Ser	Glu	Arg	Gly	Asp	Ala	Glu	Ser
		20					25					30			
Thr	His	Leu													
		35													

<210> 30

<211> 30

<212> PRT

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<223> synthetic peptide

<400> 30

Glu	Ala	Thr	Gly	Pro	Asp	Leu	Glu	Gly	Lys	Asp	Ile	Gln	Thr	Gly	Phe
1				5				10					15		

Ala Gly Arg Gly Asp Pro Ser Glu Ala Glu Ser Thr His Leu
 20 25 30

<210> 31
 <211> 33
 <212> PRT
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<400> 31
 Asn Asp Ile Ser Pro Phe Ser Gly Asp Gly Gln Pro Phe Lys Asp Arg
 1 5 10 15
 Gly Asp Ile Pro Gly Lys Gly Glu Ala Thr Gly Pro Asp Leu Glu Gly
 20 25 30
 Lys

<210> 32
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 <212> PRT
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<400> 32
 Gly Lys Gly Glu Ala Thr Gly Pro Asp Leu Glu Gly Lys Asp Ile Arg
 1 5 10 15
 Gly Asp Gln Thr Gly Phe Ala Gly Pro Ser Glu Ala Glu Ser Thr His
 20 25 30
 Leu

<210> 33
 <211> 40
 <212> PRT
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<400> 33
 Phe Ser Gly Asp Gly Gln Pro Phe Lys Asp Ile Pro Gly Lys Gly Glu
 1 5 10 15
 Ala Thr Gly Arg Gly Asp Pro Asp Leu Glu Gly Lys Asp Ile Gln Thr
 20 25 30
 Gly Phe Ala Gly Pro Ser Glu Ala
 35 40

<210> 34
<211> 31
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<213> Artificial Sequence

<220>
<223> synthetic peptide

<400> 34
Asp Gly Gln Pro Phe Lys Asp Ile Pro Gly Lys Gly Glu Ala Thr Gly
1 5 10 15
Arg Gly Asp Pro Asp Leu Glu Gly Lys Asp Ile Gln Thr Gly Phe
20 25 30

<210> 35
<211> 25
<212> PRT
<213> Artificial Sequence

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<223> synthetic peptide

<400> 35
Pro Phe Lys Asp Ile Pro Gly Lys Gly Glu Ala Thr Gly Arg Gly Asp
1 5 10 15
Pro Asp Leu Glu Gly Lys Asp Ile Gln
20 25

<210> 36
<211> 28
<212> PRT
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<400> 36
Asp Ile Pro Gly Lys Gly Glu Ala Thr Gly Arg Gly Asp Pro Asp Leu
1 5 10 15
Glu Gly Lys Asp Ile Gln Thr Gly Phe Ala Gly Pro
20 25

<210> 37
<211> 31
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<223> synthetic peptide

<400> 37

Asp Gly Gln Pro Phe Lys Asp Ile Pro Gly Lys Gly Glu Ala Thr Gly
 1 5 10 15
 Arg Gly Asp Pro Asp Leu Glu Gly Lys Asp Ile Gln Thr Gly Phe
 20 25 30

<210> 38
 <211> 28
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<220>
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<400> 38
 Gly Lys Gly Glu Ala Thr Gly Arg Gly Asp Pro Asp Leu Glu Gly Lys
 1 5 10 15
 Asp Ile Gln Thr Gly Phe Ala Gly Pro Ser Glu Ala
 20 25

<210> 39
 <211> 19
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<400> 39
 Glu Ala Thr Gly Arg Gly Asp Pro Asp Leu Glu Gly Lys Asp Ile Gln
 1 5 10 15
 Thr Gly Phe

<210> 40
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<400> 40
 Glu Ala Thr Gly Arg Gly Asp Pro Asp Leu Glu Gly Lys
 1 5 10

<210> 41
 <211> 10
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<400> 41

Glu Ala Thr Gly Arg Gly Asp Pro Asp Leu
1 5 10

<210> 42

<211> 15

<212> PRT

<213> Artificial Sequence

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<223> synthetic peptide

<400> 42

Ile Pro Ser Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu
1 5 10 15

<210> 43

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

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<400> 43

Asp Phe Glu Gly Ser Gly Tyr Thr Asp Leu Gln Glu Arg Gly Asp
1 5 10 15

<210> 44

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 44

Tyr Thr Asp Leu Gln Glu Arg Gly Asp Asn Asp Ile Ser Pro Phe
1 5 10 15

<210> 45

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 45

Glu Arg Gly Asp Asn Asp Ile Ser Pro Phe Ser Gly Asp Gly Gln
1 5 10 15

<210> 46

<211> 15

<212> PRT

<213> Artificial Sequence

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<223> synthetic peptide

<400> 46

Asn Asp Ile Ser Pro Phe Ser Gly Asp Gly Gln Pro Phe Lys Asp
1 5 10 15

<210> 47

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic peptide

<400> 47

Thr Asp Leu Gln Glu Arg Gly Asp Asn Asp Ile Ser Pro Phe Ser Gly
1 5 10 15
Asp Gly Gln Pro Phe Lys Asp
20
